

No. 828,515.

PATENTED AUG. 14, 1906.

B. SCHMIDT.
CLEARING VAT FOR SEWAGE.
APPLICATION FILED DEC. 1, 1905.

Fig. 1.

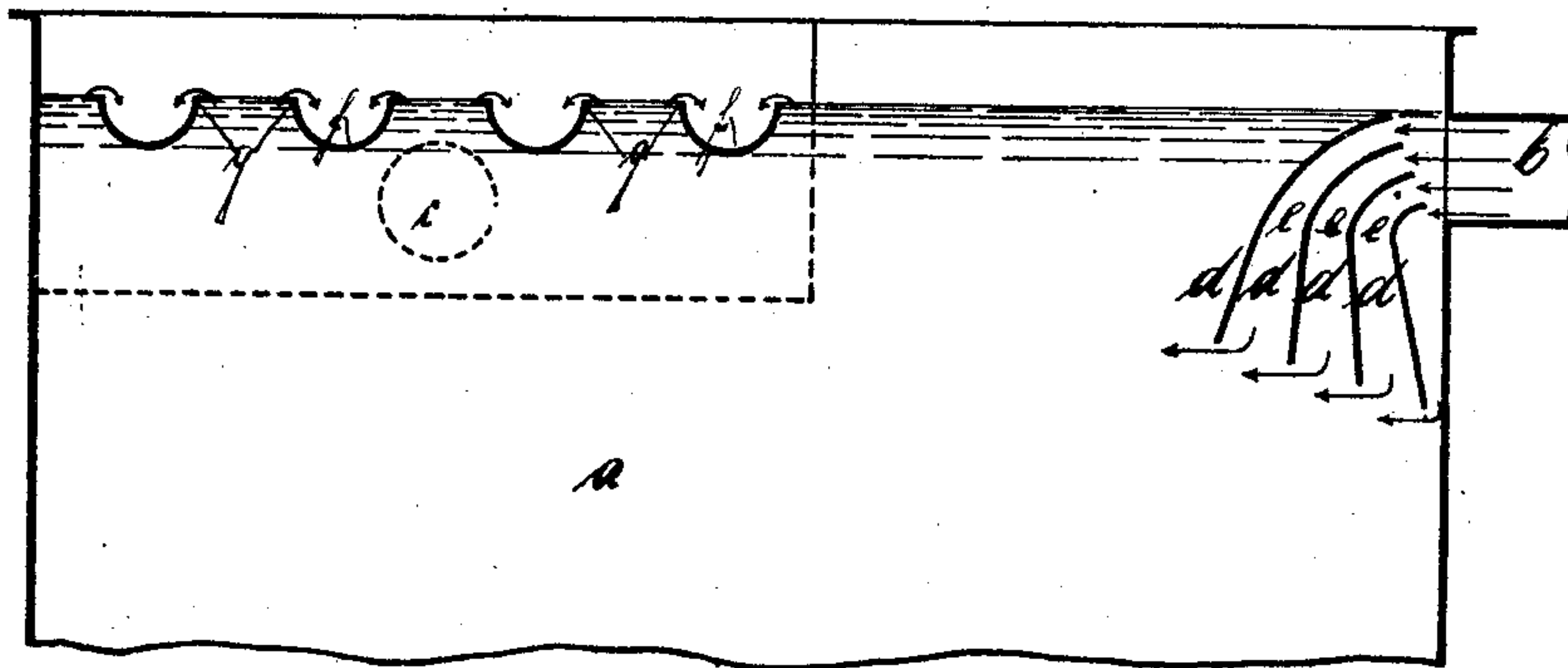
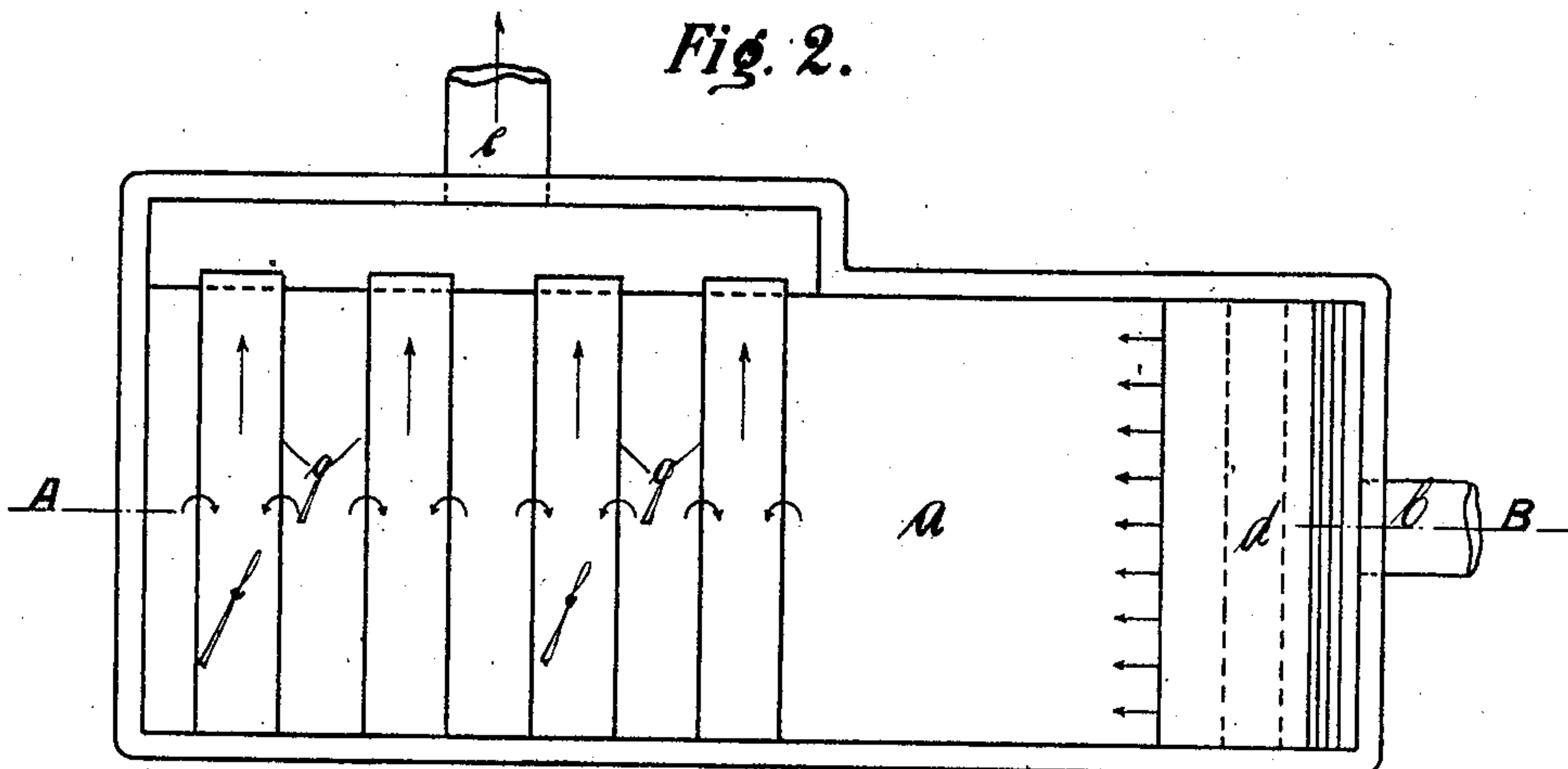


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

BRUNO SCHMIDT, OF DRESDEN, GERMANY.

CLEARING-VAT FOR SEWAGE.

No. 828,515.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed December 1, 1905. Serial No. 289,852.

To all whom it may concern:

Be it known that I, BRUNO SCHMIDT, a subject of the German Emperor, residing at Dresden, Germany, have invented certain
5 new and useful Improvements in Clearing-Vats for Sewage, of which the following is a specification.

The present invention has reference to improvements in clearing-vats for sewage, and
10 relates more especially to that class of clarifiers in which the sewage flows in longitudinal direction through the vat and is freed of its heavier suspended substances by the latter dropping down to the bottom. The
15 highest efficiency is obtained when the velocity with which the sewage passes through is relatively low.

The object of the invention is to reduce the velocity of the flow of the sewage to obtain
20 the best results in cases where the dimensions of the clearing-tank for certain reasons cannot be made as large as the given flow would require.

In order to make the invention more readily understood, I have illustrated it on the
25 accompanying sheet of drawings, Figure 1 of which represents a longitudinal vertical section through my improved clearing-vat on line A B of Fig. 2. Fig. 2 is a plan view.

30 In the tank *a*, into which the sewage or other liquid to be clarified enters through the inlet-pipe *b*, there is provided in front of the mouth of pipe *b* a series of superposed deflecting-plates *d*, extending clear across the
35 width of the vat. The number of these

plates varies according to the velocity of the
inrushing sewage. The higher the velocity
the greater the number of plates used. Each
deflector-plate *d* is curved downward, and
the lower edge of each plate extends a little
40 lower than that of the next higher plate,
forming between them downwardly-curved
sluiceways *e*, which break up the inflowing
water into wide thin bands, one above the
other. The resistance which the water
45 meets in the plates *d* and in the vat effectively reduces its velocity and improves
thereby the precipitation of the suspended
substances. The water finally flows over the
edges *g* into the troughs *f* and is conducted
50 away through pipe *c*.

What I claim is—

In a clearing-vat for sewage or the like, the combination of the vat proper, inlet and outlet openings, and a plurality of downwardly-
55 curved deflector-plates in front of the inlet-opening, extending across the entire width of the vat and each plate extending below
somewhat lower than the next higher one,
for the purpose of breaking up the liquid into
60 a number of wide, thin bands entering the vat proper at different depths, and thereby
reducing the velocity of the entering liquid,
substantially as set forth.

In testimony whereof I affix my signature
65 in presence of two witnesses.

BRUNO SCHMIDT.

Witnesses:

PAUL E. SCHILLING,
PAUL ARRAS.